

"Mobile 2G/3G networks : a Universal Communication and Services solution"

This presentation will develop the fact that Mobile 2G/3G networks offer a universal communication and services solution suitable for all type of countries. This thesis is illustrated by two closely inter-related discussion threads

- First, we show how a 2G based PLMN infrastructure can smoothly and gradually evolve in order to offer new service capabilities for end-users to the operator's benefits. The already existing fixed/mobile capability of some MSC can bring a seamless service introduction for wire line and wireless subscribers. We show how evolution steps to 2.5G Mobile Infrastructure already allow the introduction of new services and educate customers for further broadband advanced services based on the network evolution to 3G IMT-2000 networks. We also illustrate that with a proper choice of advanced technologies – like the Evolium® mobile infrastructure solution – this evolution can be realized in a cost effective manner that preserves investments made in current 2G infrastructure.
- Second, we illustrate how 2G infrastructure allows developing countries to improve the universal access to telecom infrastructure in a cost effective manner. This was helped largely due to the ubiquity of the 2G installed infrastructure (more subscribers base compare to the fixed installed base worldwide) that allowed economies of scale and provided developing countries with a competitive solution for universal access. It also shows that mobile technology can be used as an effective wireless local loop technology without resorting to the full mobility feature if priority is given to improve accessibility in areas where any type of telecom infrastructure (fixed or mobile) is lacking. It must also be noted that a 2G network with restricted mobility can perfectly co-exist with a full-fledged 2G mobility service network simply by operating it at a different frequency band.

Developed economies operators need solutions allowing them to introduce new services – and derive new revenues - at the best cost and preserve the existing investments made in current networks. Developing economies need before anything cost effective solutions to improve access to the network and offer data services (digital bridge) as well as the basic voice telephony service. It is our belief, and we bring concrete elements of proof with this presentation, that 2G technology, its evolution towards 3G IMT-2000 networks and the fixed capability of current MSC are the universal technologies suitable both for developed and developing economies.